Release notes for ENDF/B Development n-080_Hg_204 evaluation



April 26, 2017

- checkr Warnings:
 - 1. A previous error halted parsing of the current section $MAT=8049,\ MF=1,\ MT=451\ (1)$: Parsing stopped

ERROR(S) FOUND IN MAT=8049, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER 201 TO 327

- checkr Errors:
 - 1. A variable is outside the allowed ENDF range MAT=8049, MF=1, MT=451 (0): Variable range

ERROR(S) FOUND IN MAT=8049, MF= 1, MT=451
MOD = 1 OUT OF RANGE 0 - 0 RECORD NUMBER 201

2. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=2, MT=151 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY RECORD NUMBER 329

3. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=1 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY RECORD NUMBER 335

4. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=2 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 2
SECTION 3/ 2 NOT IN DIRECTORY RECORD NUMBER 429

5. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=4 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY RECORD NUMBER 523

6. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=5 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 5
SECTION 3/ 5 NOT IN DIRECTORY RECORD NUMBER 551

7. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=16 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 16 SECTION 3/ 16 NOT IN DIRECTORY

RECORD NUMBER 602

8. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 17 SECTION 3/ 17 NOT IN DIRECTORY

RECORD NUMBER 610

9. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=22 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 22 SECTION 3/ 22 NOT IN DIRECTORY

RECORD NUMBER 617

10. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 28 SECTION 3/ 28 NOT IN DIRECTORY

RECORD NUMBER 625

11. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 51 SECTION 3/ 51 NOT IN DIRECTORY

RECORD NUMBER 632

12. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=52 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 52

SECTION 3/ 52 NOT IN DIRECTORY

RECORD NUMBER 646

13. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 53 SECTION 3/ 53 NOT IN DIRECTORY

RECORD NUMBER 659

14. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=54 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 54 SECTION 3/ 54 NOT IN DIRECTORY

RECORD NUMBER 669

15. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 55 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 55 SECTION 3/ 55 NOT IN DIRECTORY

RECORD NUMBER 679

16. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 56 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 56 SECTION 3/ 56 NOT IN DIRECTORY

RECORD NUMBER 689

17. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 57 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 57 SECTION 3/ 57 NOT IN DIRECTORY

RECORD NUMBER 699

18. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 58 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 58 SECTION 3/ 58 NOT IN DIRECTORY

RECORD NUMBER 709

19. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 59 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 59 SECTION 3/ 59 NOT IN DIRECTORY

RECORD NUMBER 718

20. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=60 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 60 SECTION 3/ 60 NOT IN DIRECTORY

RECORD NUMBER 727

21. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 61 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 61 SECTION 3/ 61 NOT IN DIRECTORY

RECORD NUMBER 739

22. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=62 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 62 SECTION 3/ 62 NOT IN DIRECTORY

RECORD NUMBER 751

23. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=63 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 63 SECTION 3/ 63 NOT IN DIRECTORY

RECORD NUMBER 763

24. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 64 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 64 SECTION 3/ 64 NOT IN DIRECTORY

RECORD NUMBER 772

25. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 65 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 65 SECTION 3/ 65 NOT IN DIRECTORY

RECORD NUMBER 783

26. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 66 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 66 SECTION 3/ 66 NOT IN DIRECTORY

RECORD NUMBER 792

27. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 67 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 67 SECTION 3/ 67 NOT IN DIRECTORY

RECORD NUMBER 801

28. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 68 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 68 SECTION 3/ 68 NOT IN DIRECTORY

RECORD NUMBER 810

29. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT= 91 SECTION 3/ 91 NOT IN DIRECTORY

RECORD NUMBER 820

30. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=102 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT=102

SECTION 3/102 NOT IN DIRECTORY

RECORD NUMBER 829

31. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 103 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT=103 SECTION 3/103 NOT IN DIRECTORY

RECORD NUMBER 842

32. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 3, MT = 104 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT=104 SECTION 3/104 NOT IN DIRECTORY

RECORD NUMBER 850

33. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=3, MT=107 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 3, MT=107

SECTION 3/107 NOT IN DIRECTORY

RECORD NUMBER 858

34. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=2 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 2 SECTION 4/ 2 NOT IN DIRECTORY

RECORD NUMBER 869

35. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=16 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 16 SECTION 4/ 16 NOT IN DIRECTORY

RECORD NUMBER 5283

36. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=17 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 17 SECTION 4/ 17 NOT IN DIRECTORY

RECORD NUMBER 5286

37. Missing a section in directory so your directory is messed up. This error will break everything else $MAT=8049,\ MF=4,\ MT=22\ (0)$: Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 22 SECTION 4/ 22 NOT IN DIRECTORY

RECORD NUMBER 5289

38. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 28 SECTION 4/ 28 NOT IN DIRECTORY

RECORD NUMBER 5292

39. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=51 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 51 SECTION 4/ 51 NOT IN DIRECTORY

RECORD NUMBER 5295

40. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 52 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 52 SECTION 4/ 52 NOT IN DIRECTORY

RECORD NUMBER 5399

41. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 53 SECTION 4/ 53 NOT IN DIRECTORY

RECORD NUMBER 5488

42. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 54 SECTION 4/ 54 NOT IN DIRECTORY

RECORD NUMBER 5515

43. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 55 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 55 SECTION 4/ 55 NOT IN DIRECTORY

RECORD NUMBER 5542

44. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 56 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 56 SECTION 4/ 56 NOT IN DIRECTORY

RECORD NUMBER 5569

45. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 57 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 57 SECTION 4/ 57 NOT IN DIRECTORY

RECORD NUMBER 5596

46. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 58 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 58 SECTION 4/ 58 NOT IN DIRECTORY

RECORD NUMBER 5623

47. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 59 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 59 SECTION 4/ 59 NOT IN DIRECTORY

RECORD NUMBER 5649

48. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 60 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 60 SECTION 4/ 60 NOT IN DIRECTORY

RECORD NUMBER 5675

49. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 61 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 61 SECTION 4/ 61 NOT IN DIRECTORY

RECORD NUMBER 5749

50. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 62 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 62 SECTION 4/ 62 NOT IN DIRECTORY

RECORD NUMBER 5823

51. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=63 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 63 SECTION 4/ 63 NOT IN DIRECTORY

RECORD NUMBER 5897

52. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=64 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 64 SECTION 4/ 64 NOT IN DIRECTORY

RECORD NUMBER 5923

53. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=65 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 65 SECTION 4/ 65 NOT IN DIRECTORY

RECORD NUMBER 5995

54. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=66 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 66 SECTION 4/ 66 NOT IN DIRECTORY

RECORD NUMBER 6021

55. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=4, MT=67 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 67 SECTION 4/ 67 NOT IN DIRECTORY

RECORD NUMBER 6047

56. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 68 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 68 SECTION 4/ 68 NOT IN DIRECTORY

RECORD NUMBER 6073

57. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 4, MT = 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 4, MT= 91 SECTION 4/ 91 NOT IN DIRECTORY

RECORD NUMBER 6145

58. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 5, MT = 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 5, MT= 16 SECTION 5/ 16 NOT IN DIRECTORY

RECORD NUMBER 6172

59. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 5, MT = 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 5, MT= 17 SECTION 5/ 17 NOT IN DIRECTORY

RECORD NUMBER 6233

60. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 5, MT = 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 5, MT= 22 SECTION 5/ 22 NOT IN DIRECTORY

RECORD NUMBER 6267

61. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 5, MT = 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 5, MT= 28 SECTION 5/ 28 NOT IN DIRECTORY

RECORD NUMBER 6328

62. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=5, MT=91 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 5, MT= 91 SECTION 5/ 91 NOT IN DIRECTORY

RECORD NUMBER 6370

63. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=6, MT=5 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF= 6, MT= 5 SECTION 6/ 5 NOT IN DIRECTORY

RECORD NUMBER 6459

64. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 8049, MF = 12, MT = 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 16 SECTION 12/ 16 NOT IN DIRECTORY

RECORD NUMBER 17856

65. Missing a gamma spectrum for continuum of gammas MAT=8049, MF=12, MT=16 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 16
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

66. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=17 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 17

SECTION 12/ 17 NOT IN DIRECTORY

RECORD NUMBER 17864

67. Missing a gamma spectrum for continuum of gammas $MAT=8049,\ MF=12,\ MT=17$ (1): No gamma spectrum

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 17
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

68. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=22 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 22 SECTION 12/ 22 NOT IN DIRECTORY

RECORD NUMBER 17871

69. Missing a gamma spectrum for continuum of gammas MAT=8049, MF=12, MT=22 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 22 CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

70. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 28 SECTION 12/ 28 NOT IN DIRECTORY

RECORD NUMBER 17879

71. Missing a gamma spectrum for continuum of gammas MAT=8049, MF=12, MT=28 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 28
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

72. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=51 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 51 SECTION 12/ 51 NOT IN DIRECTORY

RECORD NUMBER 17886

73. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=52 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 52 SECTION 12/ 52 NOT IN DIRECTORY

RECORD NUMBER 17890

74. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=53 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 53 SECTION 12/ 53 NOT IN DIRECTORY

RECORD NUMBER 17894

75. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=54 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 54 SECTION 12/ 54 NOT IN DIRECTORY

RECORD NUMBER 17898

76. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=55 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 55 SECTION 12/ 55 NOT IN DIRECTORY

RECORD NUMBER 17902

77. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=56 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 56 SECTION 12/ 56 NOT IN DIRECTORY

RECORD NUMBER 17907

78. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=57 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 57 SECTION 12/ 57 NOT IN DIRECTORY

RECORD NUMBER 17911

79. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=58 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 58 SECTION 12/ 58 NOT IN DIRECTORY

80. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=59 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 59 SECTION 12/ 59 NOT IN DIRECTORY

RECORD NUMBER 17919

81. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=60 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 60 SECTION 12/ 60 NOT IN DIRECTORY

RECORD NUMBER 17923

82. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=61 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 61 SECTION 12/ 61 NOT IN DIRECTORY

RECORD NUMBER 17927

83. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=8049, MF=12, MT= 62 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 62 SECTION 12/ 62 NOT IN DIRECTORY

RECORD NUMBER 17931

84. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=63 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 63 SECTION 12/ 63 NOT IN DIRECTORY

RECORD NUMBER 17935

85. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=64 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 64 SECTION 12/ 64 NOT IN DIRECTORY

RECORD NUMBER 17939

86. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT= 65 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 65 SECTION 12/ 65 NOT IN DIRECTORY

RECORD NUMBER 17943

87. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=8049, MF=12, MT= 66 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 66 SECTION 12/ 66 NOT IN DIRECTORY

88. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=67 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 67 SECTION 12/ 67 NOT IN DIRECTORY

RECORD NUMBER 17951

89. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=68 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 68 SECTION 12/ 68 NOT IN DIRECTORY

RECORD NUMBER 17955

90. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT= 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 91 SECTION 12/ 91 NOT IN DIRECTORY

RECORD NUMBER 17959

91. Missing a gamma spectrum for continuum of gammas MAT=8049, MF=12, MT=91 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=8049, MF=12, MT= 91
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

92. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=102 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT=102 SECTION 12/102 NOT IN DIRECTORY

RECORD NUMBER 17968

93. Missing a gamma spectrum for continuum of gammas MAT=8049, MF=12, MT=102 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=8049, MF=12, MT=102 CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

94. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=103 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT=103 SECTION 12/103 NOT IN DIRECTORY

RECORD NUMBER 17982

95. Missing a gamma spectrum for continuum of gammas MAT=8049, MF=12, MT=103 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=8049, MF=12, MT=103
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

96. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=12, MT=104 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT=104 SECTION 12/104 NOT IN DIRECTORY

RECORD NUMBER 17990

97. Missing a gamma spectrum for continuum of gammas MAT=8049, MF=12, MT=104 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=8049, MF=12, MT=104 CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

98. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=8049, MF=12, MT=107 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=12, MT=107 SECTION 12/107 NOT IN DIRECTORY

RECORD NUMBER 17998

99. Missing a gamma spectrum for continuum of gammas MAT=8049, MF=12, MT=107 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=8049, MF=12, MT=107 CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

100. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=16 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 16 SECTION 14/ 16 NOT IN DIRECTORY

RECORD NUMBER 18009

101. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=17 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 17 SECTION 14/ 17 NOT IN DIRECTORY

RECORD NUMBER 18011

102. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 22

SECTION 14/ 22 NOT IN DIRECTORY

RECORD NUMBER 18013

103. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 28 SECTION 14/ 28 NOT IN DIRECTORY

RECORD NUMBER 18015

104. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 51 SECTION 14/ 51 NOT IN DIRECTORY

105. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=52 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 52 SECTION 14/ 52 NOT IN DIRECTORY

RECORD NUMBER 18019

106. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 53 SECTION 14/ 53 NOT IN DIRECTORY

RECORD NUMBER 18021

107. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 54 SECTION 14/ 54 NOT IN DIRECTORY

RECORD NUMBER 18023

108. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=55 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 55 SECTION 14/ 55 NOT IN DIRECTORY

RECORD NUMBER 18025

109. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 56 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 56 SECTION 14/ 56 NOT IN DIRECTORY

RECORD NUMBER 18027

110. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=57 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 57 SECTION 14/ 57 NOT IN DIRECTORY

RECORD NUMBER 18029

111. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 58 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 58 SECTION 14/ 58 NOT IN DIRECTORY

RECORD NUMBER 18031

112. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=8049, MF=14, MT= 59 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 59 SECTION 14/ 59 NOT IN DIRECTORY

113. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=60 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 60 SECTION 14/ 60 NOT IN DIRECTORY

RECORD NUMBER 18035

114. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 61 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 61 SECTION 14/ 61 NOT IN DIRECTORY

RECORD NUMBER 18037

115. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=62 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 62 SECTION 14/ 62 NOT IN DIRECTORY

RECORD NUMBER 18039

116. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 63 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 63 SECTION 14/ 63 NOT IN DIRECTORY

RECORD NUMBER 18041

117. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 64 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 64 SECTION 14/ 64 NOT IN DIRECTORY

RECORD NUMBER 18043

118. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 65 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 65 SECTION 14/ 65 NOT IN DIRECTORY

RECORD NUMBER 18045

119. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 66 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 66 SECTION 14/ 66 NOT IN DIRECTORY

RECORD NUMBER 18047

120. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=8049, MF=14, MT= 67 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 67 SECTION 14/ 67 NOT IN DIRECTORY

121. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 68 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 68 SECTION 14/ 68 NOT IN DIRECTORY

RECORD NUMBER 18051

122. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT= 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT= 91 SECTION 14/ 91 NOT IN DIRECTORY

RECORD NUMBER 18053

123. Missing a section in directory so your directory is messed up. This error will break everything else $MAT=8049,\ MF=14,\ MT=102\ (0)$: Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT=102 SECTION 14/102 NOT IN DIRECTORY

RECORD NUMBER 18055

124. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=103 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT=103 SECTION 14/103 NOT IN DIRECTORY

RECORD NUMBER 18057

125. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=104 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT=104 SECTION 14/104 NOT IN DIRECTORY

RECORD NUMBER 18059

126. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=14, MT=107 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=14, MT=107 SECTION 14/107 NOT IN DIRECTORY

RECORD NUMBER 18061

127. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=15, MT= 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=15, MT= 16 SECTION 15/ 16 NOT IN DIRECTORY

RECORD NUMBER 18064

128. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=15, MT= 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=15, MT= 17 SECTION 15/ 17 NOT IN DIRECTORY

129. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=15, MT=22 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=15, MT= 22 SECTION 15/ 22 NOT IN DIRECTORY

RECORD NUMBER 18159

130. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=15, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=15, MT= 28 SECTION 15/ 28 NOT IN DIRECTORY

RECORD NUMBER 18210

131. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=15, MT= 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=15, MT= 91 SECTION 15/ 91 NOT IN DIRECTORY

RECORD NUMBER 18259

132. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=15, MT=102 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=15, MT=102 SECTION 15/102 NOT IN DIRECTORY

RECORD NUMBER 18373

133. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=15, MT=103 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=15, MT=103 SECTION 15/103 NOT IN DIRECTORY

RECORD NUMBER 18601

134. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=15, MT=104 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=15, MT=104 SECTION 15/104 NOT IN DIRECTORY

RECORD NUMBER 18673

135. Missing a section in directory so your directory is messed up. This error will break everything else MAT=8049, MF=15, MT=107 (0): Directory (b)

ERROR(S) FOUND IN MAT=8049, MF=15, MT=107 SECTION 15/107 NOT IN DIRECTORY

- psyche Warnings:
 - 1. Non-threshold reaction with Q value differing from PSYCHE's expectations FILE 3 / SECTION 107 / THE CALCULATED Q 5.12412E+06 DISSAGREES WITH THE GIVEN Q 4.46075E+06 (0): Iffy Q

SECTION 107

THE CALCULATED Q 5.12412E+06 DISSAGREES WITH THE GIVEN Q 4.46075E+06

• fudge-4.0 Warnings:

1. Cross section does not match sum of linked reaction cross sections crossSectionSum label 0: total (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.29%

2. Cross section does not match sum of linked reaction cross sections $crossSectionSum\ label\ 1:\ (z,n)\ (Error\ \#\ 0):\ CS\ Sum.$

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.95%

• fudge-4.0 Errors:

1. Calculated and tabulated Q values disagree.

reaction label 20: n[multiplicity:'2'] + Hg203 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -7892349.061096191 eV vs -7490690. eV!

2. Calculated and tabulated Q values disagree.

reaction label 21: n[multiplicity:'3'] + Hg202 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -14093480.46621704 eV vs -1.34834e7 eV!

3. Calculated and tabulated Q values disagree. reaction label 22: n + H1 + Au203 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8891908.259460449 eV vs -9205220. eV!

4. Calculated and tabulated Q values disagree. reaction label 23: Hg205 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 5420788.246765137 eV vs 5.668e6 eV!

5. Calculated and tabulated Q values disagree. reaction label 24: n + He4 + Pt200 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -392414.1825561523 eV vs -500940. eV!

6. Calculated and tabulated Q values disagree. reaction label 25: H1 + (Au204-s -> Au204 + gamma) (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -1751211.489898682 eV vs -3713530. eV!

7. Calculated and tabulated Q values disagree. reaction label 26: $H2 + (Au203_s -> Au203 + gamma)$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -6674533.952850342 eV vs -6980610. eV!

8. Calculated and tabulated Q values disagree. reaction label 27: He4 + (Pt201_s -> Pt201 + gamma) (Error # 0): Q mismatch

- njoy2012 Warnings:
 - 1. Evaluation has no resonance parameters given unresr...calculation of unresolved resonance cross sections (0): No RR
 - ---message from unresr---mat 8049 has no resonance parameters copy as is to nout
 - 2. Evaluation has no resonance parameters given purr...probabilistic unresolved calculation (0): No RR
 - ---message from purr---mat 8049 has no resonance parameters copy as is to nout
 - 3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

 groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)
 - ---message from conver---cannot do complete particle production for mt= 16 only mf4/mf5 provided
 - 4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

 groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)
 - ---message from conver---cannot do complete particle production for mt= 17 only mf4/mf5 provided
 - 5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

 groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)
 - ---message from conver---cannot do complete particle production for mt= 22 only mf4/mf5 provided
 - 6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

 groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)
 - ---message from conver---cannot do complete particle production for mt= 28 only mf4/mf5 provided
 - 7. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

 groupr...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 91
                             only mf4/mf5 provided
 8. There is bad Kalbach parameter (r(E)) or otherwise)
    check...ace consistency check (0): ACER/check energy distributions (0)
     check energy distributions
      consis: ep.gt.epmax 9.901826E-12 with q.lt.0 for (n,x) at e 1.000000E-11 -> 1.000000E-11
 9. There is bad Kalbach parameter (r(E)) or otherwise)
    check...ace consistency check (1): ACER/check energy distributions (0)
     check energy distributions
       consis: awr.ge.180---there could be a legitimate positive-q channel or admixed fission.
10. There is bad Kalbach parameter (r(E)) or otherwise)
    check...ace consistency check (2): ACER/check energy distributions (0)
     check energy distributions
      consis: ep.gt.epmax 5.446004E+01 with q.lt.0 for (n,x) at e 5.500000E+01 -> 5.448059E+01
11. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (3): ACER/check energy distributions (0)
     check energy distributions
       consis: awr.ge.180---there could be a legitimate positive-q channel or admixed fission.
12. There is bad Kalbach parameter (r(E)) or otherwise)
    check...ace consistency check (4): ACER/check energy distributions (0)
     check energy distributions
      consis: ep.gt.epmax 5.941095E+01 with q.lt.0 for (n,x) at e 6.000000E+01 -> 5.945599E+01
13. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (5): ACER/check energy distributions (0)
     check energy distributions
       consis: awr.ge.180---there could be a legitimate positive-q channel or admixed fission.
14. There is bad Kalbach parameter (r(E)) or otherwise)
    check...ace consistency check (6): ACER/check energy distributions (0)
     check energy distributions
```

consis: ep.gt.epmax 1.089200E+02 with q.lt.0 for (n,x) at e $1.100000E+02 \rightarrow 1.089612E+02$

15. There is bad Kalbach parameter (r(E)) or otherwise) check...ace consistency check (7): ACER/check energy distributions (0)

check energy distributions consis: awr.ge.180---there could be a legitimate positive-q channel or admixed fission.

16. There is bad Kalbach parameter (r(E)) or otherwise) check...ace consistency check (8): ACER/check energy distributions (0)

```
check energy distributions
       consis: ep.gt.epmax 1.188218E+02 with q.lt.0 for (n,x) at e 1.200000E+02 \rightarrow 1.189120E+02
17. There is bad Kalbach parameter (r(E)) or otherwise)
    check...ace consistency check (9): ACER/check energy distributions (0)
     check energy distributions
       consis: awr.ge.180---there could be a legitimate positive-q channel or admixed fission.
18. There is bad Kalbach parameter (r(E)) or otherwise)
    check...ace consistency check (10): ACER/check energy distributions (0)
     check energy distributions
       consis: ep.gt.epmax 1.287237E+02 with q.lt.0 for (n,x) at e 1.300000E+02 -> 1.288628E+02
19. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (11): ACER/check energy distributions (0)
     check energy distributions
       consis: awr.ge.180---there could be a legitimate positive-q channel or admixed fission.
20. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (12): ACER/check energy distributions (0)
     check energy distributions
       consis: ep.gt.epmax 1.386255E+02 with q.lt.0 for (n,x) at e 1.400000E+02 \rightarrow 1.388136E+02
21. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (13): ACER/check energy distributions (0)
     check energy distributions
       consis: awr.ge.180---there could be a legitimate positive-q channel or admixed fission.
22. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (14): ACER/check energy distributions (0)
     check energy distributions
       consis: ep.gt.epmax 1.485273E+02 with q.lt.0 for (n,x) at e 1.500000E+02 -> 1.487643E+02
```

23. There is bad Kalbach parameter (r(E)) or otherwise) check...ace consistency check (15): ACER/check energy distributions (0)

check energy distributions consis: awr.ge.180---there could be a legitimate positive-q channel or admixed fission.

- acelst Warnings:
 - 1. The incident energy grid is not monotonic for this angular distribution 0: Bad Ang. Dist.

ACELST WARNING - Processing Ang.Dist.MT E-grid non-monotonic 2.000000000E+01 2.000000000E+01